PCV96

ASSOCIATIONS BETWEEN BASELINE LOW DENSITY LIPOPROTEIN CHOLESTEROL (LDL-C) LEVELS AND TREATMENT INITIATION OF SELECTED STATINS IN A MANAGED CARE POPULATION

Tunceli K[1], Sajjan S[2], Ramey DR[3]

[1]Merck & Co., Inc., Whitehouse Station, NJ, USA, [2]Merck & Co., Inc., West Point, PA, USA, [3]Merck & Co., Inc., Upper Gwynedd, PA, USA

OBJECTIVES: Individuals who are not at ATP III (Adult Treatment Panel III) LDL-C goal are recommended to take statins along with lifestyle modifications. Different lipid lowering therapies (LLT) vary in their average LDL-C efficacy. The goal of this retrospective, observational study is to examine the association between initiation of selected statins and LDL-C levels before the prescribing in a cohort of CHD/CHD risk equivalent individuals. **METHODS:** Using a large managed care administrative claims database, we identified individuals with at least one prescription for simvastatin plus ezetimibe fixed dose combination (simvastatin/ezetimibe), simvastatin, atorvastatin, or rosuvastatin between January 01, 2005 and December 31, 2006. Patients were excluded if they met any of the following criteria: use of any LLT during the 6 months prior (baseline) to the index (first prescription) date; prescription fills for more than one LLT on the index date; no lab value; or at LDL-C goal (<100 mg/dL) at baseline based on ATP III cholesterol guidelines. Three logistic regression models adjusting for age and gender were developed to examine the association between being ≥50% away from LDL-C goal at baseline and simvastatin/ezetimibe initiation (N = 2246) relative to simvastatin (N = 2615), atorvastatin (N = 5703), and rosuvastatin (N = 1446) monotherapy. **RESULTS:** A total of 13,651 eligible patients were treatment naïve and not at LDL-C goal at baseline. Compared to individuals who were <50% away from the ATP III goal, patients who were 50% or more away from goal were 1.8 (95% CI = 1.6–2.1), 1.4 (1.2–1.5), and 1.1 (0.9–1.2) times more likely to be prescribed simvastatin/ezetimibe rather than simvastatin, atorvastatin, and rosuvastatin monotherapy, respectively. **CONCLUSIONS:** The positive association between being ≥50% away from LDL-C goal and initiation of simvastatin/ezetimibe vs. simvastatin or atorvastatin suggests that physicians were choosing simvastatin/ezetimibe because of the anticipated higher efficacy with this combination than the statin monotherapy studied.

PCV97

TEN-YEARS FOLLOW-UP OF ANTI-HYPERTENSIVE MEDICATIONS WITHIN THE SLOVAK REPUBLIC

Tesar T, Foltan V, Binder R

Comenius University, Bratislava, Slovak Republic

OBJECTIVES: To analyse the utilisation of anti-hypertensive drugs within Slovakia between 1998 and 2007 and to assess the economic consequences of anti-hypertensive medications. **METHODS:** For 1998–2007, the data about consumption of drugs for cardiovascular disease were collected in accordance with ATC/DDD measurement unit. This analysis focused on the situation in anti-hypertensive medication in more detail. Data of wholesalers, who are legally obliged provide this information to the Slovak Institute for Drug Control, was used for the analysis. **RESULTS:** A significant increase in the medication cardiovascular disease in 1998 (258.55), in 2003 (380.15) and in 2007 (510.73) in term of DDD/1000/day can be seen from this analysis. The results show that the consumption (in terms of DDD/1000/day) of β-blockers was in 1998 (31.21), in 2003 (41.40) and in 2007 (47.82), Agents acting on the rennin-angiotensin system (in 1998 (39.16), in 2003 (84.88) and in 2007 (139.61), Ca-blockers (in 1998 (33.47) in 2003 (57.54) and in 2007 (77.18), Diuretics (in 1998 (27.17), in 2003 (32.56) and in 2007 (39.25), Peripheral vasodilators (in 1998 (21.14), in 2003 (20.64) and in 2007 (16.01), Serum lipid reducing agents in 1998 (7.34), in 2003 (27.21) and in 2007 (63.34). In financial terms, the consumption of β-blockers in 1998 (€8,728,000) and 2007 (€14,622,000), Agents acting on the rennin-angiotensin system in 1998 (€15,615,000) and 2007 (€55,094,000), Ca-blockers in 1998 (€14,496,000) and 2007 (€21,624,000), Diuretics in 1998 (€1,909,000) and 2007 (€4,560,000), Peripheral vasodilators in 1998 (€5,460,000) and in 2007 (€5,252,000), Serum lipid reducing agents in 1998 (€9,609,000€) and 2007 (€26,279,000€) can be seen from this study. **CONCLUSIONS:** Usage of generic drugs for the treatment of cardiovascular diseases brought about a dramatic increase in drug consumption and the financial expenditures for health insurance funds have remained under control.

PCV98

ADHERENCE TO MAINTENANCE MEDICATIONS BY DAYS SUPPLY AND DISTRIBUTION CHANNEL

Liberman JN[1], Wang Y[1], Hutchins DS[2]

[1]CVS Caremark Corporation, Hunt Valley, MD, USA, [2]CVS Caremark Corporation, Scottsdale, AZ, USA

OBJECTIVES: To compare medication adherence among patients exclusively receiving 30-day or 90-day supplies of maintenance medications from a single distribution channel. **METHODS:** Patients (n = 289,337) receiving maintenance medications with only a 30 or 90 day supply and from one distribution channel (retail/mail) for all their prescriptions were selected from a 10% random sample of members (n = 22,577,122) with continuous pharmacy benefits eligibility from July 1, 2006 through December 31, 2007. Medication Possession Ratios (MPRs) were calculated for ACEs, ARBs, calcium channel blockers (CCBs), sulfonylureas, metformin, and statins for these patients; from their first pharmacy claim between January 1 and March 30, 2007 through December 31, 2007. Patient MPRs were aggregated by their 30/90-day supplies, retail/mail channel, and whether they were initiators (no claims from July 1, 2006 to December 31, 2006) or continuers. **RESULTS:** Overall, MPRs ranged from 85% (metformin) to 88% (ACEs and CCBs) for individuals filling 90-day and 69% (metformin) to 76% (CCBs) for individuals filling 30-day supplies, with 90-day averaging 19.4% higher than 30-day. MPRs for 90-day mail were systematically higher than 90-day retail (average MPR: 82.4% vs. 80.9%), and member costs were less for 90-day mail in five therapeutic classes (average cost difference: $10.16 per prescription). Initiator MPR differences were more pronounced, ranging from 72% (statins and metformin) to 76% (ACEs) for 90-day and 52% (sulfonylureas and metformin) to 56% (statins) for 30-day supplies. Initiators who exclusively received 90-day mail prescriptions also benefited from systematically higher MPR scores (5 to 7 percentage points, on average) than those exclusively receiving 90-day retail prescriptions. **CONCLUSIONS:** Extended days supply (i.e., 90-day) for maintenance medications substantially increased adherence measures, overall and among those initiating therapy. However, lower adherence among patients receiving 90-day retail prescriptions relative to those receiving 90-day mail, may be attributable to the higher out-of-pocket costs from prescriptions for current 90-day retail programs.

PCV99

A LONGITUDINAL ANALYSIS OF ANGIOTENSIN RECEPTOR BLOCKER (ARB) PRESCRIBING PATTERNS UNDER A PRIOR-AUTHORIZATION REQUIREMENT

Kahan NR, Waitman DA, Vardy DA

Leumit Health Fund, Tel-Aviv, Israel

OBJECTIVES: Since the introduction of ARBs into the Israeli market in 2001, the Leumit Health Fund has enforced a prior authorization (PA) requirement for these relatively expensive drugs. We hypothesized that the trends in requests by physicians for these drugs would reflect the variance in the intensity of marketing campaigns for the different products over time. The objective of this study was to evaluate the trends in the patterns of requests for the ARBs available in Israel between 2001 and 2008, and to correlate the findings with available information describing the marketing campaigns that were concomitantly launched. **METHODS:** Data on all requests for PA approval for ARBs was retrieved for the relevant study period. The proportion of requests for individual drugs during each quarter of the eight years studied was calculated. The longitudinal trends in physician patterns for requests were analyzed to identify trends surrounding launch dates of new products, introduction of generic equivalents, and expiration of international marketing licenses. **RESULTS:** Initially, four different products were introduced into the market with 49% of requests for losartan, 19% for both valsartan and candesartan, and 13% for irbesartan. During the 3 month period in 2007 prior to the introduction of generic losartan when the drug was no longer being detailed, the proportion of requests for all drugs was: valsartan 58%, losartan 24%, candesartan 17%, and olmesartan 1%. Similar trends were identified for other drugs. **CONCLUSIONS:** Analysis of variance in the proportion of PA requests for drugs within a pharmacological category is a feasible method for monitoring physician prescribing behavior which may be strongly influenced by aggressive marketing. Under a PA constraint this method is preferable since dispensing data poorly reflects MD preferences due to the barrier created by PA.

PCV100

PATTERN OF CLOPIDOGREL USE IN PERCUTANEOUS CORONARY INTERVENTION PATIENTS

Yu HT[1], Dean BB[1], Bae JP[2], Fiske S[1], Xiong Y[1], Emons MF[1]

[1]Cerner LifeSciences, Beverly Hills, CA, USA, [2]Eli Lilly and Company, Indianapolis, IN, USA

OBJECTIVES: Clopidogrel at a 300 mg loading dose is approved in acute coronary syndrome (ACS) patients who undergo percutaneous coronary intervention (PCI). Studies suggest clopidogrel generates more benefit if it is given early. Giving a loading dose of 600 mg has been suggested to achieve a more rapid inhibition of antiplatelet aggregation. This study examined real world clopidogrel use pattern among patients who undergo PCI. **METHODS:** HealthFacts® (Cerner Corp) is electronic medical record data with time-stamped information. Study cohort was 6,253 PCI patients who received a minimum 300 mg loading of clopidogrel between 24 hours before and up to 6 hours after PCI either with or without ACS diagnoses from 40 interventional cardiology centers between January 2006 and March 2008 (Elective PCI n = 3,922, ACS-PCI n = 2,331, of which 972 had UN/NSTEMI). High dose was defined as ≥600 mg. Early treatment was reported at 6 hours for 300 mg and 1 hour for 600 mg prior to PCI. **RESULTS:** Slightly over half(56.9%) the patients received 600 mg or higher loading dose, and 32.0% received 300 mg. The remaining 11.1% received a dose in between. Loading was given as bolus in 75.4%, two doses in 21.5%, and ≥3 in 3.1%. Among UA/NSTEMI subgroup, 25.8% initiated first does at >6 hours, and additional 9.6% started their high dose ≥1 hour prior to PCI. A majority (68.3% of PCI, and 56.4% in UA/NSTEMI), however, received clopidogrel during or after PCI. **CONCLUSIONS:** There exist some uncertainties about optimal dosing of clopidogrel in patients who undergo PCI. While 600 mg was frequently chosen, early treatment with clopidogrel was relatively rare in this sample. Further observation will be required to monitor guideline adherence and outcomes.